

Republic County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

6/12/2018

Using the most recent IMPLAN data available (2016) adjusted for 2018, 16 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Republic County economy.¹

These 16 sectors have a total direct output of approximately **\$207.4 million** and support **723 jobs** in Republic County. Running the model for all 16 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Republic County Economy						
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵	Output % of Gross Regional Product
Direct Effect	722.7	21.44%	\$48,448,713	24.72%	\$207,387,594	105.80%
Indirect Effect	309.7	9.19%	\$17,738,507	9.05%	\$33,763,262	17.22%
Induced Effect	242.1	7.18%	\$14,781,690	7.54%	\$27,700,570	14.13%
Total Effect	1274.5	37.81%	\$80,968,910	41.31%	\$268,851,426	137.15%

As shown in the above table, agriculture, food, and food processing sectors support **1,275 jobs**, or **37.81%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$268.9 million**, roughly **137.15% of the economy**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 16 agriculture, food, and food processing sectors is approximately **\$81.0 million**, or **41.31% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **41.31% of the total economy**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **304 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Republic County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	304.2	\$43,018,538
Grain farming	144.8	\$60,617,726
Support activities for agriculture and forestry	113.1	\$5,845,533
Wholesale trade	79.6	\$12,898,359
All other crop farming	76.0	\$6,431,061
All other food manufacturing	70.7	\$23,264,755
Oilseed farming	50.3	\$57,444,024
Hospitals	30.6	\$3,812,101
Farm machinery and equipment manufacturing	24.9	\$11,269,509
Truck transportation	22.8	\$3,718,860

The grain farming sector directly contributes approximately **\$60.6 million** to the Republic County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Grain farming	144.8	\$60,617,726
Oilseed farming	50.3	\$57,444,024
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	304.2	\$43,018,538
All other food manufacturing	70.7	\$23,264,755
Wholesale trade	79.6	\$12,898,359
Farm machinery and equipment manufacturing	24.9	\$11,269,509
All other crop farming	76.0	\$6,431,061
Owner-occupied dwellings	0.0	\$5,857,727
Support activities for agriculture and forestry	113.1	\$5,845,533
Hospitals	30.6	\$3,812,101

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Republic County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	50.3	\$57,444,024.09
Grain farming	144.8	\$60,617,726.38
Vegetable and melon farming	10.1	\$1,325,654.77
Fruit farming	0.3	\$19,203.92
Tree nut farming	0.0	\$10.87
Greenhouse, nursery, and floriculture production	16.9	\$1,449,039.60
All other crop farming	76.0	\$6,431,060.90
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	304.2	\$43,018,537.61
Poultry and egg production	0.4	\$257,440.31
Animal production, except cattle and poultry and eggs	3.6	\$459,638.47
Bread and bakery product, except frozen, manufacturing	2.9	\$324,630.05
Frozen cakes and other pastries manufacturing	0.2	\$26,162.93
All other food manufacturing	70.7	\$23,264,754.63
Farm machinery and equipment manufacturing	24.9	\$11,269,509.07
Veterinary services	12.6	\$1,274,785.22
Landscape and horticultural services	4.8	\$205,415.25

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Republic County, the retail sector was omitted.